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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,404	03/26/2004	Yoshiyuki Kodama	9319S-000671	1281

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EXAMINER	
SITTA, GRANT	

ART UNIT	PAPER NUMBER
2629	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/812,404	KODAMA, YOSHIYUKI	
	Examiner	Art Unit	
	GRANT D. SITTA	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19,22 and 23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19,22 and 23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-6,8-10, 12-14,16-18, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson et al (6,445,489) hereinafter, Jacobson, in view of Mitsui et al (2002/0145687) hereinafter Mitsui.

4. In regards to claims 1 and 13, Jacobson discloses the limitations a display device including: a first display disposed on a display screen side of the display device (fig. 1 (10)); and

a second display disposed on a rear surface side of the display device (fig. 1 (14));

the first display including (col. 8, lines 46-53):

a self-luminous layer that self-emits desired color lights in response to a first applied voltage (col. 6, lines 28-40) ; and

the second display including:

an electrophoresis layer that displays two colors in response to a second applied voltage (col. 3-4, lines 65-15),

wherein one of the transparent electrodes is shared by the first display and the second display (col. 4, lines 50-52).

Jacobson differs from the claimed invention in that Jacobson does not disclose a pair of transparent electrodes disposed so as to sandwich the self- luminous layer;

However, Mitsui teaches a system and method for a pair of transparent electrodes disposed so as to sandwich the self- luminous layer ((fig. 13 (19 and 20) [0076-0078] of Mitsui).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Jacobson to include the use of a pair of transparent electrodes disposed so as to sandwich the self- luminous layer; as taught Mitsui in order to provide means of addressing both displays separately.

5. In regards to claim 5, Jacobson discloses the limitations a display device including: a first display disposed on a display screen side of the display device (fig. 1 (10)); and

a second display disposed on a rear surface side of the display device (fig. 1 (14));

the first display including (col. 8, lines 46-53):

a self-luminous layer that self-emits desired color lights in response to a first applied voltage (col. 6, lines 28-40) ; and

the second display including:

a reflective display layer that displays two colors in response to a second applied voltage (col. 4, lines 57-67); and

control means for controlling the display states of the first display and the second display, wherein:

the control means causes the first display to display color display data included in display (col. 8, lines 32-46) contents and causes the second display to display monochromatic display data included in the display contents; and (col. 8, lines 3256),

wherein one of the transparent electrodes is shared by the first display and the second display (col. 4, lines 50-52).

Jacobson differs from the claimed invention in that Jacobson does not disclose a pair of transparent electrodes disposed so as to sandwich the self- luminous layer;

However, Mitsui teaches a system and method for a pair of transparent electrodes disposed so as to sandwich the self- luminous layer ((fig. 13 (19 and 20) [0076-0078] of Mitsui).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Jacobson to include the use of a pair of transparent electrodes disposed so as to sandwich the self- luminous layer; as taught Mitsui in order to provide

means of addressing both displays separately.

6. In regards to claim 14, Jacobson discloses the limitations a display method comprising:

causing a display device having a reflective display disposed on a rear surface side of (col. 4, lines 57-67) a self-luminous transmissive display to display display contents (col. 6, lines 27-40);

causing the transmissive display to display color display data included in the display contents with a self-luminous layer that self-emits desired color lights in response to a first applied voltaqe (col. 8, lines 32-47); and

causing the reflective display to display monochromatic display data included in the display contents with an electrophoresis layer that displays two colors in response to a second applied voltage (col. 8, lines 32-47),

wherein one of the transparent electrodes is shared by the transmissive display and the reflective display (col. 4, lines 50-52)

Jacobson differs from the claimed invention in that Jacobson does not disclose a pair of transparent electrodes disposed so as to sandwich the self- luminous layer;

However, Mitsui teaches a system and method for a pair of transparent electrodes disposed so as to sandwich the self- luminous layer ((fig. 13 (19 and 20) [0076-0078] of Mitsui).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Jacobson to include the use of a pair of transparent electrodes

disposed so as to sandwich the self- luminous layer; as taught Mitsui in order to provide means of addressing both displays separately.

7. In regards to claim 2 Jacobson teaches wherein the two-color display comprises a black-and-white display (col. 8, line 33 "graycale").

8. In regards to claim 3, Jacobson teaches wherein the self-luminous layer comprises an organic electroluminescence layer (col. 6, line 39).

9. In regards to claim 4, Jacobson teaches further comprising control means for controlling the display states of the first display and the second display (col. 3, lines 65-5, "systems for addressing such displays…").

10. In regards to claim 6, Jacobson teaches wherein the control means causes the first display to display color display data included in display contents and causes the second display to display monochromatic display data included in the display contents (fig. 5 and col. 8 lines 32-67). Examiner notes, further more, when the data is the same data for the first and second displays also reads on the claims.

11. In regards to claim 8, Jacobson teaches wherein the control means causes the first display to display the color display data included in the display contents and displays, in a dark color, a portion of the second display superposed on a display

region of the color display data (col. 8 lines 33-67) .

12. In regards to claim 9, Jacobson teaches wherein the control means causes the second display to display the character data included in the display contents and sets, to a light-emitting state, a portion of the first display at least substantially superposed on a bright color display region of the character data (col. 8 lines 33-67).

13. In regards to claim 10, Jacobson as modified by Mitsui teaches the display device of claim 5, further comprising mode selection means for enabling a user to select a power-saving mode, wherein, when the power-saving mode is selected, the control means causes the second display to also display, in two colors, the color display data included in the display contents ([0149] of Mitsui).

14. In regards to claim 12, Jacobson as modified by Mitsui teaches the display device of claim 5, further comprising incident light amount detecting means for detecting the amount of light incident to the display screen, wherein the control means controls the brightness of the first display in response to the incident light amount ([0149] of Mitsui, automatically powered on/off from a light sensor).

15. In regards to claim 16, Jacobson teaches wherein the transmissive display is made to display the color display data included in the display contents and a portion of

the reflective display superposed on a display region of the color display data is displayed in a dark color (col .8, lines 32-67).

16. In regards to claim 17, Jacobson teaches wherein the reflective display is made to display the character data included in the display contents and a portion of the transmissive display at least substantially superposed on a bright color display region of the character data is set to a light-emitting state (col .8, lines 32-67).

17. In regards to claim 18, Jacobson as modified by Mitsui teaches wherein when a power- saving mode is selected by a user ([0149] of Mitsui), the reflective display is also made to display, in two colors, the color display data included in the display contents (col. 8, lines 32-57 of Jacobson).

18. In regards to claim 22, Jacobson as modified by Mitsui wherein said second display disposed on a rear surface side of the display device is viewed from said display screen side (fig. 4 (15, 13 and 14) of Mitsui).

19. In regards to claim 23, Jacobson as modified by Mitsui wherein said second display disposed on a rear surface side of the display device is viewed from said display screen side (fig. 4 (15, 13 and 14) of Mitsui).

20. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson and Mitsui, in view of Seymour (WO 02/089102) hereinafter, Seymour.

21. In regards to claim 7, Jacobson and Mitsui disclose the limitations of 5.

Jacobson and Mitsui differs from the claimed invention in that Jacobson and Mitsui do not disclose wherein the control means causes the first display to display color photographic data included in the display contents and causes the second display to display monochromatic photographic data and character data included in the display contents

However, Seymour teaches a system and method for wherein the control means causes the first display to display color photographic data included in the display contents and causes the second display to display monochromatic photographic data and character data included in the display contents (fig. 1 (3 and 2)) page 14 lines 5-25 of Seymour).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Jacobson and Mitsui to include the use of wherein the control means causes the first display to display color photographic data included in the display contents and causes the second display to display monochromatic photographic data and character data included in the display contents as taught by Seymour in order to improve assimilation of the content as stated in (page 11, lines 15-25 of Seymour).

22. Claim 15 is rejected for the same reasoning as claim 7.

23. Claims 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson, in view of Mitsui, and further in view of Shimotono et. al (US PUB 6,509,911) hereinafter, Shimotono.

24. In regards to claims 5 and 14 , Jacobson and Mitsui disclose the limitations of claim 5 and 14, respectfully.

Jacobson and Mitsui differ from the claimed invention in that Jaconson and Mitsui do not disclose wherein when the state where the first display is displaying the color display data included in the display contents passes a set amount of time, the control means automatically moves to a state where the second display is allowed to display, in two colors, the color display data.

However, Shimotomo teaches a system and method for wherein when the state where the first display (fig. 5 (3)) is displaying the color display data included in the display contents passes a set amount of time, the control means automatically moves to a state where the second display is allowed to display, in two colors (fig. 8 (3)), the color display data.(col. 8, lines 39-67 of Shimotomo active and inactive displays).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Jacobson and Mitsui to include the use of wherein when the state where the first display is displaying the color display data included in the display contents passes a set amount of time, the control means automatically moves to a state where the second display is allowed to display, in two colors, the color display data as

taught by Shimotomo in order to conserve power on inactive displays as stated in (col. 1-2, lines 35-15 of Shimotomo).

Response to Arguments

25. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Wilkinson (6,140,986) combined monochrome and color display.

Hiroaki (6,661,425) overlapped image display type information input/output apparatus.

Hernriksson (7,205,959) multi-layerd display.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GRANT D. SITTA whose telephone number is (571)270-1542. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629

/GDS/
May 22, 2008